

Table S1. List of *S. salmonicolor* and *S. johnsonii* strains used in this study and relevant information pertaining to them.

Species	Strain	Sexuality ^a (mating tests)	STE3 alleles		HD1/HD2 alleles		Source
				GenBank accession numbers		GenBank accession numbers	
<i>Sporidiobolus salmonicolor</i>	CBS 1012	A2	STE3.A2	HM133782	A2-16	GU474649	Leaf of <i>Aristolochia</i> sp., hot-house of Botanic Laboratory, Delft, Netherlands
	CBS 1013	A2	STE3.A2		A2-14	GU474650	Air in dairy, USA
	CBS 1039	A2	STE3.A2	HM133779	A2-14	GU474651	Air in dairy, USA
	CBS 2635	A2	STE3.A2		A2-13	GU474652	Infected skin of a man, Germany
	CBS 2873	A2	STE3.A2		A2-15	GU474653	Extract of oak bark, France
	CBS 4030	A2	STE3.A2		A2-10	GU474654	Soil, New Zealand
	CBS 487	A2	STE3.A2		A2-10	GU474655	Air, Japan (type strain of <i>Pseudomonilia rubiduncula</i> Okunuki)
	CBS 490 ^T	A2	STE3.A2	GU474641	A2-10	GU474656	Culture contaminant (type strain of <i>Sporidiobolus salmonicolor</i> Fell & Statzell Tallman)
	CBS 495	A2	STE3.A2		A2-13	GU474657	Culture contaminant, Japan
	CBS 496	A2	STE3.A2		A2-10	GU474658	Scorched skin of orange, Delft, Netherlands
	CBS 5937	A2	STE3.A2		A2-14	GU474659	Cariou dentine, South Africa (type strain of <i>Aessosporon salmonicolor</i> van der Walt)
	CBS 6322	A2	STE3.A2	HM133783	A2-12	GU474660	Rotting wood shavings, Chile
	CBS 6470	A2	STE3.A2		A2-15	GU474661	Air, Germany
	CBS 6530	A2	STE3.A2	HM133780	A2-15	GU474662	Bog, locality unknown
	CBS 6781	A2	STE3.A2		A2-15	GU474663	Bituminous soil, oil field near Cumanà, Venezuela (type strain of <i>Sporidiobolus veronae</i> Balloni et. al.)
	CBS 6832	A2	STE3.A2	GU474646	A2-15	GU474664	Cerebro-spinal fluid, India (type of <i>Sporobolomyces salmonicolor</i> Kluyver & van Niel var. <i>fischeri</i> Misra & Randhawa)
	CBS 7260	A2	STE3.A2		A2-13	GU474665	Slime flux of <i>Quercus pendunculata</i> , Russia (type strain of <i>Sporobolomyces philippovii</i> Krasil'nikov)
	PYCC 5245	A2	STE3.A2		A2-13	GU474666	Unknown substrate, Portugal
	RJB 8219	A2	STE3.A2	HM133781	A2-15	GU474667	Isolated by R. J. Bandoni
	RJB 950	A2	STE3.A2	HM133784	A2-11	GU474668	Isolated by R. J. Bandoni (deposited at CBS as <i>Sporobolomyces odorus</i> Derx)
ZP 392	A2	STE3.A2	HM133778	A2-10	GU474669	Fruit body of <i>Dacrymyces</i> sp., Germany	
CBS 2647	A1	STE3.A1	HM133773	A1-2	GU474670	Gut of <i>Drosophila</i> sp., locality unknown	

Table S1. Continued.

Species	Strain	Sexuality ^a (mating tests)	STE3 alleles		HD1/HD2 alleles		Source
				GenBank accession numbers		GenBank accession numbers	
<i>Sporidiobolus salmonicolor</i>	CBS 2648	A1	STE3.A1		A1-5	GU474671	Exudate of <i>Kalopanax vicinifolium</i> var. <i>typicum</i> , isolated by K. Tubaki, Japan
	CBS 4474	A1	STE3.A1	HM133770	A1-5	GU474672	Blistered skin of a man, Bonn, Germany
	CBS 483	A1	STE3.A1	GU474642	A1-2	GU474673	Rusted leaf of <i>Citrus</i> sp., France (type strain of <i>Sporobolomyces odor</i> Derx)
	CBS 497	A1	STE3.A1		A1-4	GU474674	Unknown (deposited at CBS as <i>Rhodomyces kochii</i>)
	CBS 6529	A1	STE3.A1		A1-3	GU474675	Culture contaminant, R.J. Bandoni
	IHMT 2446/96	A1	STE3.A1	HM133771	A1-6	GU474676	Skin lesion, Portugal
	NRRL Y-17498	A1	STE3.A1	HM133772	A1-3	GU474677	Ice core, Greenland
	ML 2241	A1	STE3.A1	GU474643	A1-3	GU474678	Isolated by J. W. Fell
	PYCC 4558	A1	STE3.A1	HM133774	A1-1	GU474679	Polluted river water, Oeiras, Portugal
	PYCC 4623	A1	STE3.A1		A1-3	GU474680	Soil, USSR
	RJB 948	A1	STE3.A1		A1-3	GU474681	Isolated by R. J. Bandoni (deposited at CBS as <i>Sporobolomyces odor</i> Derx)
	ZP 648	A1	STE3.A1	HM133769	A1-4	GU474682	Leaf of <i>Ligustrum</i> sp., Monte de Caparica, Portugal
	CBS 2641	AS	STE3.A2		A2-10	GU474683	Air, Netherlands
CBS 4029	AS	STE3.A2		A2-15	GU474684	Soil, New Zealand	
<i>Sporidiobolus johnsonii</i>	CBS 2634	A2	STE3.A2	GU474647	A2-17	GU474685	<i>Fragaria</i> sp., Japan (deposited at CBS as <i>Sporidiobolus johnsonii</i> Nyland)
	CBS 2630	A1	STE3.A1		A1-9	GU474686	Air, The Netherlands
	CBS 2643	A1	STE3.A1		A1-9	GU474687	Isolated by S. Windisch, Germany
	CBS 4209	A1	STE3.A1	HM133776	A1-8	GU474688	Fruit body of <i>Exidia</i> sp., Japan (type strain of <i>Sporobolomyces coralliformis</i> Tubaki)
	PYCC 4351	A1	STE3.A1	GU474644	A1-9	GU474689	Leaf of a tree, Portugal
	CBS 1522	AS	STE3.A1	HM133775	A1-9	GU474690	Fodder yeast, Germany (type strain of <i>Sporobolomyces holsaticus</i> Windish)
	CBS 7795	AS	STE3.A1	HM133777	A1-7	GU474691	Culture contaminant, isolated by W. I. Golubev, Russia
	CBS 5470 ^T	SF	STE3.A1 STE3.A2	GU474645 GU474648	A1/A2-18	GU474692	Leaf of <i>Rubus idaeus</i> with dead pustule of <i>Phragmidium rubi-idaei</i> , USA (type strain of <i>Sporidiobolus johnsonii</i> Nyland)
	CBS 8241	SF	STE3.A1 STE3.A2		A1/A2-18	GU474693	Unknown

^aThe mating type designations (A1 or A2) were re-assigned to match the “molecular mating type” identified by PCR detection of the pheromone receptor alleles (*STE3.A1* or *STE3.A2*).